Leading into the Future:
Innovative Entrepreneurs & Corporate Caligulas

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Professor
Key Learning

• Emergent & Analytical Strategies for Growth, Innovation & Change

• VUCAH
  – Volatility, Uncertainty, Complexity, Ambiguity, Hyperconnected

• Building an Innovation Sandbox

• Innovation Culture
Marshmallow Tower Game
Marshmallow Game Rules

- Build the tallest freestanding structure your team can
- Structure measured from the top of the table to the top of the marshmallow
- Structure has only Spaghetti, Marshmallow, String and Tape
- The entire marshmallow must be on top
- OK to break the Spaghetti, String and Tape
- OK to tape the structure to the table
- The game lasts approximately 10 minutes
- Cannot use the paper bag or scissor or scale as part of the structure
- Cannot hold on to the structure when the time runs out
- Structure cannot be suspended from a higher structure, e.g., ceiling
- Do not search the internet for answers
Game Summary
Typical Progress

Source: Tom Wujec, Autodesk
Who consistently performs poorly?

Recent Business School Graduates
Who consistently performs well?

Recent Kindergarten School Graduates

Source: Tom Wujec, Autodesk
Innovation Sandbox
The Innovator’s DNA that Generates New Ideas

- Courage to Innovate
- Behavioral Skills
- Cognitive Skill to Synthesize Novel Inputs
- Innovative Ideas

Sub-processes:

- Challenging the Status Quo
- Taking Smart Risks
- Questioning
- Observing
- Networking
- Experimenting
- Associational Thinking
- Innovative Ideas

Based on: The Innovator’s DNA, page 27
Where Good Ideas Come From

By Steven Johnson
Why?

Source: Tom Wujec, Autodesk
Creativity Loves Constraints

TED Talk by Martin Villeneuve

Innovation without boundaries is chaos!
High Stakes

Marshmallow Challenge
PAY TO THE ORDER OF $10,000
TEN THOUSAND DOLLARS
IN THE AMOUNT OF

Source: Tom Wujec, Autodesk
Motivation – Performance – Creativity

Drive by Dan Pink
Marshmallow Game Lessons

• Understanding known and unknown variables
• Rapid Prototyping uncovers hidden variables and their relationships
  – Fail Fast, Fail Cheap, Learn Quick, Refine and Repeat
• Diverse skills matter
• Specialized skills + Facilitation skills matters
• Incentives magnify outcomes
  – Big Bang vs. Start Small
• Incentives without skills are useless

Source: Tom Wujec, Autodesk
Leading into the Future: Managing Innovation Projects

Analytical and Emergent Strategies (Prediction and Creation Logic)
Healthcare.gov Crashes During First Day

In the grand scheme of ObamaCare, the first day of open enrollment today is pure symbolism and nothing else, however the early signs are not good.

Healthcare.gov has crashed, and users are receiving error messages as seen below.

The System is down at the moment.

We’re working to resolve the issue as soon as possible. Please try again later.

Please include the reference ID below if you wish to contact us at 1-800-318-2596 for support.

Crash Sinks Course on Online Teaching

Students were asked to sign up for groups using Google Docs, but a spokesman for Google Inc. said the program allows only 50 people to edit a document simultaneously. When the crush of students tried to sign up, the system crashed, said Debbie Morrison, who was in the class.

Ms. Wirth emailed an apology, but when things didn't improve she, in conjunction with Georgia Tech and Coursera, pulled the plug on the course.

The cancellation sparked an outpouring of online ire even though the class was free. Ms. Morrison wrote on her blog: "How Not to Design a MOOC: The Disaster at Coursera and How to Fix it."
Christine Day Steps Down As Lululemon CEO

Posted: 06/10/2013 7:12 pm EDT

Lululemon chief executive officer Christine Day is stepping down after five and a half years at the helm of the international apparel retailer famous for its yoga wear. The company said Monday that Day will be replaced by former Abercrombie & Fitch executive and Lululemon chairman Chip Wilson. The move comes as the retailer faces a recall of 18 million yoga pants over threadbare seams, a boardroom battle with Wilson and a tough retail environment.
Johnson was criticized for eliminating the company’s sales and coupons last year without a broad market test, a move that led to a sales slump. “…deserved criticism for unleashing a series of pricing and merchandising changes without first testing consumer views.”
Sebelius Resigns After Troubles Over Health Site

By MICHAEL D. SHEAR  APRIL 10, 2014

Kathleen Sebelius, the health and human services secretary, before a Senate hearing Thursday.

Michael Reynolds/European Pressphoto Agency
Some Empirical Findings About Innovation

75% of all new products launched by established firms fail to make profit. Most are yanked/killed without shaping & developing them.

Given more money & time, firms are known to pursue the wrong strategies for a longer period of time.

More than 90% of all Innovations that were successful started off in the wrong direction.

Most new innovations are started with access to no credit in good times and in bad.

Most of the great businesses today started without a lot of VC funding or any bank lending until 5-6 years after they were up and running.

Sources: Innosight; Amar Bhide; Barton
94% of executives agree that people and corporate culture are the most important drivers of innovation.

Overall dissatisfaction with dismal outcomes of innovation programs.

CEOs and Executives are frustrated with their efforts to jumpstart innovation initiatives.

Mimicking and benchmarking best practices have been ineffective.

Resources and Processes that are applied are either underutilized or not achieving scale to have a financial impact.

Source: The McKinsey Quarterly, 2008 no. 1
BUSINESSMEN THRIVE ON RISK...

...BEING BOLD... TAKING CHANCES!

SO WHY AREN'T YOU INVESTING NOW?

TOO MUCH UNCERTAINTY!
Environmental Conditions

- Steady and Stable
- Slowly changing, Predictable, Trends are Evident
- Increasing Rate of Change with Some Predictability, Foreseen Trends May Appear
- Rapid Change, Little Predictability, Many Surprises
- Chaotic & Unpredictable

Risk
Uncertainty
Ambiguity

Normal
Complicated
Complex
Nature of Innovation Projects

Outcome

Unknown Unknowns

Known Unknowns

Known Knowns

Process

Risk

Uncertainty

Ambiguity
Leading into the future: Analytical Strategy

Scan and analyze the Environment
Predict trends
Use WACC & IRR to set aggressive goals
Set strategy and set budgets
Draw detailed project plans
Choose teams and assign KPIs
Execute to plan
Kill project when projections don’t materialize
Leading into the future: Emergent Strategy

Think Different
Think Big
Start Small
Start Several
Prototype Rapidly
Proof of Concept = Voice of Customer + Voice of Tech.
Fail Fast, Fail Cheap, Learn Quick
Pour Resources only after Proof of Concept
Celebrate Success & Celebrate Failure
Leading into the future: Analytical Strategy

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Implementing the health insurance marketplaces is a unique challenge in magnitude and complexity.

Establishing all new infrastructure and different business arrangements with new customers to CMS where sellers require education and buyers require sustained education and outreach.

Example influencers and partner agencies:
- CMS
- IRS
- Medicaid
- CHIP
- Social Security USA

Interacting, aligning, and integrating multiple very large organizations with potentially different definitions of success.

Buyers and sellers:
- Consumers
- Employers
- Issuers

Assistors:
- Navigators
- Brokers/agents
- Certified counselors

Federally facilitated marketplace:
- Channels:
  - Website
  - Data exchange
  - Call-center
  - Identity mgmt
  - Manual processing
  - Call center operations
- Infrastructure:
  - Plan mgmt
  - Privacy & security

State marketplaces:
- State managed marketplaces
- State partnership marketplaces
- State departments of insurance

Supporting a complex and flexible state marketplace and partnership model.

Educating and certifying assistors for enrollment

Launching at scale from day one in all 50 states
Programs of this type ideally have a sequential planning, design, and implementation process with significant testing and revision.

**Ideal large-scale program development**

<table>
<thead>
<tr>
<th>Start</th>
<th>Finish</th>
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<tbody>
<tr>
<td>Define policy / requirements</td>
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<tr>
<td>Design</td>
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<tr>
<td>Build</td>
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<tr>
<td>Test</td>
<td>Gradual launch</td>
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**Description of ideal situation:**
- Clear articulation of requirements & success metrics
- Minimized dependency on third parties
- Sequential requirements, design, build, and testing
- Iteration and revision between phases
- End-to-end integrated operations and IT testing
- Limited initial launch

**Current situation:**
- Evolving requirements
- Multiple definitions of success
- Significant dependency on external parties/contractors
- Parallel “stacking” of all phases
- Insufficient time and scope of end-to-end testing
- Launch at full volume

**CMS has been working to mitigate challenges resulting from program characteristics**

**Characteristics of this program**

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<tr>
<td>Test</td>
<td>Launch at scale</td>
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**Limited end-to-end testing. Testing will continue to be performed after launch.**
## Bing Bang vs. Start Small Strategies

<table>
<thead>
<tr>
<th><strong>BIG BANG</strong></th>
<th><strong>START SMALL</strong></th>
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<tbody>
<tr>
<td>ANALYZE</td>
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<tr>
<td>ANALYZE</td>
<td>HYPOTHESIZE</td>
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<tr>
<td>PREDICT</td>
<td>DESIGN</td>
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<tr>
<td>PREDICT</td>
<td>BUILD – GOOD ENOUGH</td>
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<tr>
<td>DESIGN FULL FEATURES</td>
<td>TEST</td>
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<tr>
<td>PLAN</td>
<td>FAIL FAST, SMALL, CHEAP</td>
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<tr>
<td>PLAN</td>
<td>LEARN – UNCOVER UNKNOWNS</td>
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<td>PLAN</td>
<td>ITERATE – REDESIGN, BUILD, TEST, FAIL AGAIN, UNCOVER MORE</td>
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<tr>
<td>BUILD FULL SCALE</td>
<td>GRADUAL LAUNCH, SCALE SLOW</td>
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<tr>
<td>LAUNCH FULL SCALE</td>
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**Bing Bang** vs. **Start Small** Strategies

### Bing Bang
- Analyze
- Analyze
- Predict
- Predict
- Design Full Features
- Plan
- Plan
- Plan
- Build Full Scale
- Launch Full Scale

### Start Small
- Analyze
- Hypothesize
- Design
- Build – Good Enough
- Test
- Fail Fast, Small, Cheap
- Learn – Uncover Unknowns
- Iterate – Redesign, Build, Test, Fail Again, Uncover More
- Gradual Launch, Scale Slow
Leading into the Future

- Steady and Stable
- Slowly changing, Predictable, Trends are Evident
- Increasing Rate of Change with Some Predictability, Foreseen Trends May Appear
- Rapid Change, Little Predictability, Many Surprises
- Chaotic & Unpredictable

Analytical Strategy
- Environmental Scanning
- Predictive Models
- Set Strategy
- Project Planning
- Budget & KPIs
- Execution Plan

Prediction Logic
- Emergent Strategy
  - Think Big
  - Start Small
  - Start Several
  - Prototype Rapidly
  - Fail Fast, Fail Cheap, Learn Quick
  - Pour Resources after POC

Risk
Incremental Innovation
Uncertainty
Radical Innovation
Ambiguity

Creation Logic
How do you get better at Emergent Strategy & Creative Logic?

• Learning by Doing
  – Action and Analysis
    • Take action to produce data and uncover variables
    • Generate data vs. Using existing data
  – Experimentation encouraged and Failure OK
  – Grounded in reality vs. Speculation
  – Entrepreneurial Thought and Action

• Value Diversity and Inclusion
  – Several functions and across layers

• Learn to Improvise
  – Fluid and flexible processes

• Portfolio of Projects (Risky, Uncertain & Ambiguous)
IDEO Video